

Solus: An Online Audiovisual Installation (NIME2020 installation proposal)

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1. CONCEPT AND MOTIVATION

Since early March 2020 we have needed to remain indoors in our respective homes, some 200 miles apart in Central and North East England. At the time of writing (early May 2020), the UK presides over the largest number of COVID-19 deaths in Europe and the second largest number worldwide [1].

Our experiences of this period are not only strange but ‘eerie’. The eerie, Fisher [2] suggests, is:

[...] constituted by a failure of absence or by a failure of presence. The sensation of the eerie occurs either when there is something present where there should be nothing, or there is nothing present when there should be something.

Our own experiences are of both tenets simultaneously: our isolation is, in some respects, emphatic, yet hyper-connectivity and newfound expectations around extended contact and constant availability fill previous downtime. At the same time, the ‘old’ units of time (days, weeks) are dissolved by detemporalisation; previous routines are rendered obsolete and there is little sense of linear procession towards an unknown ‘new normal.’

If homes have always enforced a distinction between interior and exterior, this has been amplified in current times; walls have become barely permeable boundaries punctured only by light, sound and occasional deliveries. SOLUS is a real-time online installation that uses microphones and video cameras as tools by which to puncture these boundaries with an act of shared liminality. As such, SOLUS offers a kind of aggregated interiorisation – in sound and image – of the environments immediately outside; but more than this, it reflects on, distils and documents our particular experiences and perceptions of time and distance.

2. PROJECT DESCRIPTION

Cameras will capture live images from two near-identical skylight windows located in our home studio/workspaces at our respective homes in Central and North East England (Fig. 1).



Fig. 1. Locations of the artists in Central and North East England.

Given our foundation in Fisher's [2] concept of the eerie, we are particularly interested in how, although we are off-camera, there may be visual traces of our presence; reflections of our daily lives on the glass, of interior lights being turned on and off, and so on. Thus, influenced by the 1972 Francis Bacon painting *Diptych: Two Studies for Self-Portrait*,¹ the two live image feeds will be composited side-by-side (Fig. 2); a kind of double portrait in absentia. For practical reasons, the Central site will receive the North East camera feed and create a real-time image (in Max/Jitter), before outputting the composite image (as well as audio) to a Twitch live stream (Fig. 3).² While the two halves of the composite image may often be similar moment-to-moment, there will inevitably be significant differences (in colour, gradient, texture, etc.) over time; created, for instance, by local variations in weather.



Fig. 2. Example composite of the two live images.

The same Max/Jitter patch will also handle the installation audio. External sounds will be collected by two small condenser microphones and one contact

¹ <https://www.francis-bacon.com/life/biography/1970s/diptych-two-studies-self-portrait-77-02>

² <https://cvcling74.com/articles/streaming-tips-the-jitter-edition>

microphone in each location (3 audio channels at each site). As with video, North East site audio will be streamed to the Central site for processing (Fig. 3).

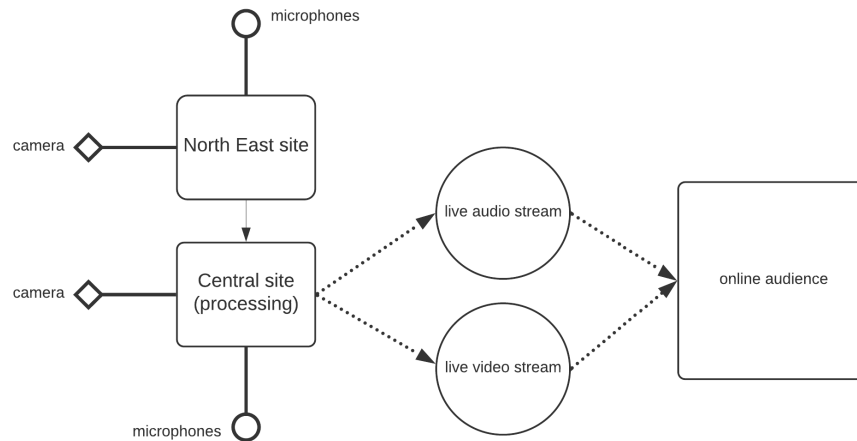


Fig. 3. Topology of the Solus online installation.

At the central site, the Max patch groups the six audio channels into a Central group and a North East group. Each group is subject to a separate aleatoric, Cadavre Exquis-like [3] mixing process that, at chance intervals, crossfades between the audio channels, to produce a cut-up, single-channel (mono) output. These real-time audio outputs (one for each group) are used as the basis for further concatenative sound synthesis.

As Schwarz describes, concatenative methods typically employ a corpus of source sounds (units) and a selection algorithm to find the units that best match the (pre-recorded file or a live) synthesis target [4]. In this installation, the Max patch uses the two (mono) cut-up audio outputs to perform both roles simultaneously:

- The output of the first Cadavre Exquis mixer (Central group) is buffered and used as the corpus for a target based on the live output of the second Cadavre Exquis mixer (North East group).
- The output of the second Cadavre Exquis mixer (North East group) is buffered and used as the corpus for a target based on the live output of the first Cadavre Exquis mixer (Central group).

These processes form the final stereo audio output of the Max patch/installation, panned hard left and hard right respectively. The ListenTo plugin/service by Audiomovers³ will be used to stream this audio output directly from the Max patch in high quality. The result is an ever-changing, real-time soundscape that contains elements of a more documentary reality, but, like the cut-up novels of Burroughs [5], resists linear structure and narrative.

³ <https://audiomovers.com/>

3. ADDITIONAL TECHNICAL INFORMATION (USER EXPERIENCE)

The online installation will run continuously throughout the NIME conference period and will be accessible at any time (no downtime is planned).

Online visitors will need to use a laptop/desktop web browser to experience the installation. Chrome and Firefox (cross-platform) are recommended. Each visitor will need to open two browser tabs simultaneously:

- a live video stream on Twitch: <https://www.twitch.tv/mdwlv>
- an Audiomovers/ListenTo live audio stream (URL on the Twitch page)

The Twitch stream will also feature lower quality (160kbs) AAC audio as a lower bandwidth alternative and/or backup option. Good quality headphones are recommended to experience the installation.

4. MEDIA LINK(S)

- Audiovisual documentation: <https://github.com/matdwlv/solus>

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COMPLIANCE WITH ETHICAL STANDARDS

We agree to uphold all ethical guidelines for NIME publications. There are no known potential conflicts of interest (financial or non-financial) and no human subjects or animals are involved in the project.

BIOGRAPHIES

Mat Dalglish is Postgraduate subject leader and Senior Lecturer in Music Technology at the University of Wolverhampton (UK). The author of more than 30 peer-reviewed conference papers, journal articles and book chapters, his current research is focussed around music interaction and procedural audio for theatre. He has previously created new musical instruments for disabled users and exhibited internationally. Beyond his current role, Mat has worked at The Open University Music Computing Lab, acted as industry and academic consultant, and been a reviewer for the SSHRC (Canada), MIT Press and Intellect.

Francesca Steele is an artist researching the body and uses autobiographical mining to create works that shift between body, screen and page. Awarded the Belsay Hall Fellowship in 2006, Francesca has been commissioned by English Heritage and Wellcome Trust and presented at the Women of the World festival (2015), the CCA (2012) and ICA (2015). Her work has been exhibited internationally and featured in The Live Art Almanac (2008) and Marina Abramovic and the Future of Performance Art (2010). Francesca is currently a PhD candidate at Derby University (UK) and recipient of a Post-Graduate Teaching Award. Dalglish and Steele met in 2002 while studying fine art (sculpture) at Northumbria University.

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